Japan–World Bank Partnership Program on UHC: What Japan Can Share from Its Experiences

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I. Japan’s achievements

• Universal population coverage

• Low out-of-pocket (OOP) expenditures: 14.4% of THE

• Copayment rate is basically 30%, but 10% for most elders, and becomes 1% when the monthly copayment exceeds the ceiling

• All effective and safe services & drugs included in benefit

• Ratio of the THE to GDP is relatively low at 9.6%, especially as elders 65+ compose 25% of the population

• Provides alternative to NHS and market-based models
  – Has integrated and developed the private sector into UHC
Achieving population coverage

• Employment-based health insurance
  – Initially only for manual laborers and miners in 1927, and gradually expanded to other employees and to dependents
  – The 1,500 programs divided into 3 groups: GMHI (now NHIA) for small companies, SMHI for large companies; MAA for the public sector

– Residence-based health insurance
  – Citizens’ Health Insurance (CHI) implemented in 1938 which encouraged municipalities to voluntarily establish CHI programs
  – Gradually expanded and made mandatory in 1959: All covered in 1961
  – Currently 1,800 programs, the number of municipalities and prefectures

• Motive for expansion
  – Before WWII, all political parties united to build a warfare state, and after the war, to build a welfare state
Growth in the percentage of the population covered by social health insurance (SHI) in Japan

[Source: Yasuo Takagi (1994) “Kokuminkenkohoken to chiiki fukushi: choki-nyuin no zehi to kokuho-anteika taisaku no jissai to mondaiten” Quarterly of Social Security Research 30(3):239
Note: Figures for periods during World War II are estimates.]
From population coverage to UHC

• Although all became enrolled in SHI, UHC was not fully achieved
  – 50% copayment except for those formally employed
  – Extra billing (charging patients for services not covered) not explicitly regulated

  ➤ Many still at risk of impoverishment from out-of-pocket payment

• 1973: Ceiling for monthly copayments set
• 1983: Extra billing explicitly regulated

  ➤ UHC achieved
Challenges facing UHC

• Over 3,000 SHI programs, each with different premium rates
  – Insurance principle: Income↓, age↑ ⇒ Premium rate↑
  – Percentage of income levied as premiums differs 3+ times

• Disparities in income mitigated by subsidies from tax
  – CHI, Programs for 75+: 50%; NHIA: 16.4%

• Disparities in age composition mitigated by all SHI programs equitably contributing to the healthcare costs of elders

• Disparities among SHI programs↑ ⇒ Need to mitigate↑ ⇒ Fiscal burden for government↑, Contributions from employment-based SHI plans↑
Flow of money in SHI Programs, 2011

- Tax
- Premiums

Employer

Employee

Others

75 and over

1st Tier
Large companies: 1348
Public sector: 78
Seamen: 1

2nd Tier
National Health Insurance Association: 1

3rd Tier
Citizens’ Health Insurance: 1742
CHI Unions: 166

4th Tier
10%
40%
50%

1st ~ 3rd Tier plans

47 Prefectures
II. Provider payment system: Fee Schedule

• Challenges facing payment systems:
  – Fee-for-service (FFS): Provides incentives but cost escalations
  – Global budgets: No incentive, encourages services to be provided by private sector, leading to inequity

• “Fee Schedule” has responded to the two challenges
  – Provider payment is based on FFS
  – But a global budget sets a ceiling on SHI expenditures

• Why is it possible?
  – Controls not only price, but volume of services by setting the conditions of billing
  – Fees revised item-by-item, balancing impact on providers
Multiple functions of the Japanese payment system

Programs: 3,000+
- Employment based programs (1,500)
- Residence based programs (1,800)

Single payment: FFS

Fee schedule

Defines benefits
Sets price and conditions for billing
While staying within global budget

Providers: Private sector dominated
- Hospitals (80%)
- Clinics (95%)
What does the Fee schedule determine?

All patients: Benefit package and copayment rates
- More than 95% of out-of-pocket payment is to pay copayment for services and drugs listed
- Extra billing is restricted to extra room charges and new technology being officially evaluated for its efficacy and safety
- Balance billing is strictly prohibited

Nearly all health facilities: Prices and conditions of billing
- Regulates over 95% of revenues of all providers by setting price and also controls volumes and quality of care
  - Example: Conditions for rehabilitation therapy: Provider must employ 5 or more physiotherapists and meet minimum physical requirements such as therapy room > 160m²; Patient must be within 150 days of onset
- Adherence to these conditions is monitored through claims reviews and on-site audits to monitor adherence
- Each health facility can determine the wages of physicians, nurses and other staff, within the revenue that is regulated by the Fee Schedule
Revisions of the Fee Schedule

Revised every two years: 3 Steps

1\textsuperscript{st} Step: Setting the global revision rate
- Total healthcare expenditures = Global revision rate \times \text{Previous year’s expenditures} + \alpha
- \alpha: Non-price factor increases ("Natural increase")
  - Shifts to more expensive services by advances in technology (CT\rightarrow MRI), increases in volume due to aging
  - Calculated based on the increase rate in the last 3 years: 2-3\% per year

2\textsuperscript{nd} Step: Setting the revision rate for each item
- \sum (price of each item\uparrow\downarrow \times volume of services and drugs, etc.) = Total healthcare expenditures based on the above 1\textsuperscript{st} step

3\textsuperscript{rd} Step: Revising the conditions of billing
Process of revising the Fee Schedule

• **1\textsuperscript{st} Step: Setting the global revision rate**
  – Ministers of Finance and Health together with top bureaucrats set the rate; final approval by cabinet

• **2\textsuperscript{nd} Step: Setting the revision rate of each item**
  – Adjust the revision rates so that their total impact is made equal to the amount set by the 1\textsuperscript{st} step
  – Volume of each item is available from the national claims database

• **3\textsuperscript{rd} Step: Revising the conditions of billing**
  – Fine tuned to set quality standards and to contain supply

• **2\textsuperscript{nd} and 3\textsuperscript{rd} Steps negotiated between Health Ministry and provider organizations**
Impact of reducing MRI scan fees on costs

Number of Scans (Left Axis)
Expenditures for MRI (Right Axis)

Fees decreased 30% so as to stay within -2% global revision rate cap in 2002

Source: Ministry of Health, Labour and Welfare (MHLW) "Survey of Medical Care Activities in Public Health Insurance"
Price when first listed and subsequent revisions

• Set price not based on actual costs, but on similar existing technology

• Price of MRI was set at twice that of CT when listed in 1985
  – Price of purchasing MRI was ten times that of CT at that time
  – Impacts of listing estimated from the projected number of scans

• Why does Japan have the highest per capita number of MRIs in the world, despite low price set by the fee schedule?
  – Health facilities purchased to attract more patients and physicians
  – Manufacturers developed cheaper machines and gave big discounts

• Prices were made different according to image density from 2006: Higher prices for high-density MRI offset by lowering the price of low-density MRI
Drugs: Launch price and revisions

• The launch price of a new drug is usually set by marking up the price of the comparator based on its relative efficacy and innovativeness
  – Once approved for efficacy and safety, the product is automatically listed in the fee schedule

• Price is then reduced to reflect the margin between the market and the wholesale price at the time of the fee schedule revision → Downward spiral of prices

• But the above does not reflect the decrease of costs when the product’s patent expires
  – 98% of the cost of brands is for R&D
  – Current policy on promoting the use of generics is inadequate
How drug prices are decreased
⇒ Market mechanism

Fee schedule sets the price of a product at $10 per tablet

Health Ministry survey of wholesalers shows the volume & price of product X as:
- 10,000 tablets sold @ $9.50 ($0.5 profit to providers)
- 10,000 tablets sold @ $9.00 ($1.0 profit to providers)
- 10,000 tablets sold @ $8.50 ($1.5 profit to providers)

Volume weighted average market price for one tablet was $9.00

Revised fee schedule price for one tablet is $9.18

2% margin allowed

Starting price for the next round of negotiations by providers and wholesalers on the purchasing price
Comparison of the Composition of Brands and Generics in Platinum Containing Agent for Anticancer in Japan and the U.S.: VOLUME (2002-2012)

Source: Copyright 2014 IMS Health. All rights reserved. Estimated based on IMS JPM March MAT 2002–13.
Comparison of the Composition of Brands and Generics in Platinum Containing Agent for Anticancer in Japan and the U.S.: SALES (2002-2012)

Source: Copyright 2014 IMS Health. All rights reserved. Estimated based on IMS JPM March MAT 2002–13.
Fee Schedule’s critical role in the distribution of physicians

• Fee Schedule sets the *same fee, regardless of the local cost of living*
  – By receiving the same amount for the same service, rural hospitals can set higher wages for their physicians, and lower wages for their nurses and other staff, urban hospitals
  – Physicians in large urban hospitals are willing to work at lower wages because they can deliver high-tech care and live in big cities
  – Nurses and other staff in rural hospitals are willing at lower wages in rural hospitals because they can live in their home town

• Fee Schedule sets *relatively higher fees for primary care services compared with high-tech care*
  – Gives incentives for hospital specialists to go into private practice
  – When they do so, they cannot access hospital facilities
Difference in income among physicians and nurses according to site (¥100 = US$1)

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<thead>
<tr>
<th></th>
<th>Physicians</th>
<th>Registered Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big city municipal hospitals</td>
<td>$164,000 (sub-specialists)</td>
<td>$60,000</td>
</tr>
<tr>
<td>Town &amp; village municipal hospitals</td>
<td>$197,000 (specialists)</td>
<td>$54,000</td>
</tr>
<tr>
<td>Private practice clinics</td>
<td>$210,000 (primary care)</td>
<td>—</td>
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Balancing non-monetary rewards with monetary rewards
Sharing experiences: Historical decisions made

• Licensing of physicians: Initially rapid, gradually tightened
  – In 1882, existing practitioners and their sons were formally given licenses by the government
    • Left intact the basic structure of private practitioner-centered delivery system
  – In 1883, government restricted licenses to graduates of university-level schools, and to those of vocational-level schools who have passed licensing examination
    • Government gradually raised accreditation standards of vocational-level schools
  – In 1952, vocational level abolished, all schools became university-level
  – Government has consistently set standards for establishing medical schools, and controlled the number of enrollees

• Licensing of nurses: 2 levels, Registered N & Licensed Practical N
  – Respond to increases in hospital beds, and improving the quality of care
  – Flexible career path from LPN to RN
Sharing experiences: Current situation

• UHC achieved by expanding SHI but disparities in premium rates⇒ Should have been integrated earlier

• Regulated fee-for-service under the Fee Schedule has:
  – Contained healthcare costs by regulating not only price, but also volume
  – Maintained equity by restricting extra-billing and prohibiting balance billing
  – Integrated and made the private sector vibrant
  – Balanced physicians’ financial and non-financial rewards by setting prices nationally uniform and by its structure
    • Income of specialists in big city hospitals < Income of physicians in rural clinics